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4051	ATCGTGCGGTCGCCAGAGCACCAGTGCCATGAGCCTGGCCTGGCCCGCCATCCAGC 4110
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4654 4696	AGAACCCTCTACTTGCTAGCTCGCTGACTAAACAGCGCTGGGGTCACGCCTTA 4755
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4921 5056	GIGAAGAAAGIGAAACAGICCCIGGCCCAGICCCACCIGCCIACCCAGCCCGACAICICA 4980
4981	CCCAACATTTTTGAAGCTGTCAAGGGCTGCCACTTGTTTGGGGCAGGCA

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5041 GGGCTCTGCATCTGTGCAGCCATGCCCAGCAAAGTCGTCATTCTCCGCTACAAAAC 5100 5176 GGGCTCTGCATCTGTGCAGCAAAAC 5235 5296 TICACCAATTACAGTATCCTCATTGGAAQCAATAATTCTACGAAATCGACATGAAGCAG 5355 5221 TACACGCTCGAGGAATTCCTGGATAAGAATGACCATTCCTTGGCACCTGCTGTGTTTGCC 5280 5716 TCCTCAGGAGCGATTTACTTGGCGTCCTCATACCAGGATAAATTAAGGGTCATTTGCTGC 5775 5641 AAGGGAAACTTCGTGAAGGACTCGGCACTGAACACCACCGGGGCCCGTCCACCTCCCGC 5700 ARUSES24 (Crik) 11-NOV-1998 MRNA linear ROD 11-NOV-1998 Mus musculus rho/rac-interacting citron kinase (Crik) mRNA, complete cds. 5161 ITCACCAATTACAGTATCCTCATTGGAACCAATAAATTCTACGAAATCGACATGAAGCAG 5220 5356 TACACGCTCGAGGAATTCCTGGATAAGAATGACCATTCCTTGGCACCTGCTGTGTTTGCC 5415 5581 TCCTCAGGAGCGATTTACTTGGCGTCCTCATACCAGGATAAATTAAGGGTCATTTGCTGC 5640 5281 GCCTCTTCCAACAGCTTCCCTGTCTCAATCGTGCAGGTGAACAGCGCAGGGCAGCGAGAG 5340 5416 GCCTCTTCCAACAGCTTCCCTGTCTCAATCGTGCAGGTGAACAGGGCAGGGCAGCGAGG 5475 5401 CGCACAGACGATCICAAGTGGAGTCGCTTACCTTTGGCCTTTGCCTACAGAGAACCCTAT 5460 5536 CGCACAGACGATCTCAAGTGGAGTCGCTTACCTTTTGGCCTTTGCCTACAGAGAACCCTAT 5595 ITCAACTCACTCGAAGTAATTGAGATCCAGGCACGCTCCTCAGCA 5520 5596 CTGTTTGTGACCGACTTCAACTCGAAGTAATTGAGATCCAGGCACGCTCCTCAGCA 5655 5461 CTGTTTGTGACCCAC 5701 AG \$702 5836 AG 5837 LOCUS ACCESSION ઠ g ò g ò 임 ò g à ద ઠે g δ d ò g ö d g à g

AF086824.1 GI:3599508

Mus musculus (house mouse) ORGANISM VERSION KEYWORDS SOURCE

Mus musculus Bukaryota Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butebria, Rodentia, Sciurognathi, Muridae, Musinae, Mus 1 (bases 1 to 6954) REFERENCE

. [Dases 1 to 6954] Di Cunto,F., Calautti,E., Hsiao,J., Ong,L., Topley,G., Turco,E. and Dotto,G.P. Citron rho-interacting kinase, a novel tissue-specific ser/thr kinase encompassing the Rho-Rac-binding protein Citron J. Biol. Chem. 273 (45), 29706-29711 (1998) A AUTHORS JOURNAL TITLE

(bases 1 to 6954) 9792683 MEDLINE PUBMED REFERENCE

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                                                                                                                                                                                                                                             /function="protein kinase"
//notes="CRIK; rho/rac binding protein; alternatively
spliced form of citron encoded by GenBank Accession Number
AF039218; similar to Mus musculus citron-K encoded by
GenBank Accession Number AF070066; similar to Rattus
norvegicus citron-K encoded by GenBank Accession Number
Di Cunto, F., Calautti, E., Hsiao, J., Ong, L., Topley, G., Turco, E. and
                         Submitted (25-AUG-1998) Biology, University of Torino, Via Santena 5 bis, Torino, TO 10126, Italy Location/Qualifiers
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/db xref="taxon:10090"
                                                                                            /tissue_type="spleen"
1. .6954
                                                                                                               gene≈"Crik"
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                                                       1. .6954
         Dotto, G.P.
Direct Submission
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Query Match 70.5%; Score 4612.4; DB 10; Length 6954; Best Local Similarity 85.6%; Pred. No. 0; Matches 5341; Conservative 0; Mismatches 641; Indels 254; Gaps

ITKRVASSPAPPEGPSHPREPSTPHRYRDREGRTELRRD RRERSPGRLFEDSSRGRLPAGAVRTPLSQVNKVWDQSSV

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64 GCTGCTGAACCCATTGCCAGCCGGGCCTCCAGGCTGAATCTGTTCTTCCAGGGGAAACCA 123

1237 regarcccccaerracaeraceccrrrcaesacaaaaaraaccrrraccresceresaa 1296 1357 AGCATGATCCAGTTTTACCTTGCTGAGCTGATTTTGGCTGTCCACAGCGTGCACCAGATG 1416 1083 1057 gacińcgaagtrogaagccirchegcrichegreacitectrocheaagtecageregraaga 1116 1177 CAGGAACAGGTTTCATTTTCGAGGAGGAGGAACATATTATCTCGGAGCACGAGTCCT 1236 783 1477 AAGCTGGTGGATTTTGGATCAGCCGCTAAGATGAATTCAAATAA---GGTGGATGCCAAA 1533 1654 ATGGTTTATGGGAAGACCCCATTCACAGAGGGAACCTCCGCCCGGACCTTCAACAAAC 1713 964 AIGAATTTCCAGCGGTTTTTGAAATTTCCAGATGACCCCAAAGTGAGCAGTGACTTTCTT 1023 1144 GTTCCCACCTCAAGTCTGACGATGACACTCCAATTTGATGAACCAGAGAATTGG 1203 544 TATCAGCCTGGAGGGGACTTGCTGTTTTGAATAGATGAGGACCAGTTAGAAA 603 1143 424 CAGGAGCAGGTTTCATTTTTGAGGAAGAGCGGAACATATTATCTCGAAGCACAAGCCCG 483 664 GGATACGTGCATCGAGACATCAAGCCTGAGAACATTCTCGTTGACCGCACAGGACACATC 723 844 GGAAAAGGCACCTACGGCCTGGACTGTGACTCGTGGTCAGTGGCGTGATTGCCTATGAG 903 184 TITGITCICITIGAAGAAIGCAGTCAGCTGCTGATGAAGAITAAGCACGTGAGCAAC 243 244 ITTGTCCGGAAGTATTCCGACACCATAGCTGAGTTACAGGAGCTCCAGCCTTCGGCAAAG 303 877 CCCCTCATGACTCAACAGCAGATGTCTGCTTTTCCCGGGAAGGGATGCTAGACGCCCTC 936 937 TTCGCTCTCTTTGAAGAGTGCAGCCAACCCGCCTGATGAAGATGAAGCACGTGAGCAGC 817 GCCTCCGAGCCCATTGCCAGTCGGCCTCCAGGCTAAATCTCTTCCTGCAGGGAAAACG 876 124 CCCTTTATGACTCAACAGCAGATGTCTCCTCTTTCCCGAGAAGGGATATTAGATGCCCTC 183 304 GACTITCGAAGICAGAAGICTTGIAGGITGIGGICACTITIGCIGAAGIGCAGGIGGIAAGA 364 GAGAAAGCAACCGGGGACATCTATGCTATGAAAGTGATGAAGAAGAAGAAGGCTTTATTGGCC 484 TGGATCCCCCAATTACAGTATGCCTTTCAGGACAAAAATCACCTTTATCTGATGGAGGAA 604 AACCIGATACAGITITACCIAGCIGAGCIGATITITGGCIGITCACAGCGITCATCIGATG 724 AAGCIGGIGGATITIGGATCIGCCGCGAAAATGAATTCAAACAAGAIGGIGAAATGCCAAA 784 CICCCGAILGGGACCCCAGAITACAIGGCICCIGAAGIGCIGACIGIGAIGAACGGGGAI 904 ATGATTTATGGGAGATCCCCCTTCGCAGAGGGAACCTCTGCCAGAACCTTCAATAACATT 1834 IGCCACCCTTTCTTTGCCAGAACGGACTGGAACAACATCCGTAACTCCCCCCCTTC 1714 AIGAACTICCAGGGGTITITIGAAGTICCCAGATGACCCCAAAGTIAGCAGTGAGCTCCTT 1024 GATCTGATTCAAAGCTTGTTGTGCGGCCAGAAAGAGAGACTGAAGTTTGAAGGTCTTTGC 1774 GATCTGCTTCAGAGTCTGCTGTGTGTCCAGAAAGAGAGACACTGAAGTTCGAGGGTCTCTGC 1084 TGCCATCCTTTCTTCTTAAATTGACTGGAACAACATTCGTAACTCTCCTCCCCCTTC

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GGLPAEYATHFTEAFCRDKOMSPGLOSKEFGSSLHLEGWKKVPRINKRGOGGWDRKYI
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GPAISSGAIYLARSYCOKKLYICCKGNLVKESGTEGRRYPSTSRSSPNKRGPFYNDRI
ITKRVASSPRARGEPTYNDR

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3152 3272 2835 GACCACAGCAGAAGCTGAAGAGGAGTCCAGGCACTCACGGCACATAGAGATGAAATCCA 2894
3633 GACAACCGCGGAAGGGGAGGAGGAGAATCCAGGCGCTCACGGCACATCGCGATGAGATCCA 3692 2654 3452 2714 2774 3752 3813 ACTCGATGAGGCTTCCGGGGCCAATGACGAGATTGTGCAGCTGCGGGAGTGAGGTGGAGGTGACCA 3872 3333 deladadarrrracerdadadeceladeceladadecreadadeceladadeceladadece 3453 GCTGGAAACAAGGCTGAGGAGGTCAGGACGACGAGGAGCAGAAGCTGAA 3512 ACTCGATGAGGCTTCTGGCGCCAACGACGAGATTGTACAACTGCGAAGTGAAGTGGACCA 3074 4052 3572 GOCTOTICAAGACCACGTGCACCATGCTGGAACAGGTCATGGATTTGGAGGCCCTAAA 3194 GAMATCCCAGTTTGAGTGTCGGGTTCGAGAGCTGCAGAAATGCTGGACACCGGAGAAACA 3314 4053 GAAGTCCCAGTTCGAGTTCGAGTTCGAGAGCTACAGAGGATGCTGGACACACGAGAAGCA 4112 3033 CTIGAAACAGAACAGCACTACGAGGAAAAGATCAAGGTATIGGACAATCAGATAAA CCATGAGAAGGCCAAAATTCTCAGCGAACAGAAGGCGATGATCAATGCTATGGATTCCAA 2895 GCGCAAAITTGATGCTCTTCGTAACAGCTGTAATCACAGACCTGGAACCTGGAGCAGCT
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6228 GGCCGGGCAGCGAGAATACCTGCTGTGCTTCCACGAATTTGGGGTGTTCGTGGATTC 6287
                                                                                                                                                                                                                                                                                                                                                                                                                                                            6348 CTÁCAGAGAACCTTATCTGTTTGTGACTCACTTCAACTCCCTGGAAGTCÁTTGÁGÁTCÓA 6407
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                                                                                                                5385 TTACGGAAGACGTAGCCGCACCATCTCAAGTGGAGTCGCTTACCTTTGGCCTTTGC
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AF099218 Sature norvegicus postsynaptic degality protein (ditzon) mRNA, complete cds. AF039218.1 GI:2745839 ACCESSION VERSION KEYWORDS SOURCE ORGANISM DEFINITION AF039218 LOCUS

REFERENCE

TITLE

TITLE JOURNAL REFERENCE AUTHORS JOURNAL FEATURES

Rattus norvegicus (Norway rat) Rattus norvegicus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentýa; Sciurognathi; Muridae; Murinae;

Rattus. 1 (bases 1 to 5952)

2 (bases 1 to 5952)/
Zhang,W., Apperson,W.L. and Kennedy,W.B.
Direct Submission
Submitted (18-DEC/1997) Biology, Caltech, Pasadena, CA 91125, USA Zhang, W., Apperson, M.L. Vasquez, L.E. and Kennedy, M.B. Citron, a PSD-95-binding protein at glutamatergic synapses on inhibitory neurons Jnpublished

1. .595¢ /organjsm="Rattus norvegicus" /mol_t/pe="mRNA"

Location//Qualifiers

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#KEASTPEEFSRRALKERMHINI PHRENVGLWRRATKCAVCLDTVHFGRQASKCLECQV TECSSLKRSLEGÅRMEVSOEDDKALOLLHDIREOSKLOEIKEOEKÖAOVEEMRLMMN QLEEDLVSARBKSDLYESELRESRLAAEEFKRKANECOHKLMKAKDLGKPEVGECSRL EKINAEQOLKLOEKJEKAVKASTEATELLQNIRQAKERAERELEKLHNREDSSEG IKKKLVEAEÉRRHSLENKVKRLETMERRENRLKODIÇTKSEQIQQMADKILELEEKHR BAQVSAGHÍEVHIKQKEGHYERKIKVLDNOIKVGLADKESLETMMORHEERAHEKKKI LSEQKAMÍNAMDSKIRSLEGRIVELSEANKLAANSSLFTQRNMKAQEEMISELRQOKF YLETQAĞLLEAQNKKLEBĞLEĞISTAGHSDRNRLLELETRERREVSLEHEGKLEIKRG LTELQIĞLQERESÇLTALQAARAALESQLRQAKTELEETTREREVELEHEGKLEIKRD CHPRCSTCLPATCGLPAEYATHFTEAFCRDKVSSPGLQSKEPSSSLHLEGGMMKVPRN NKRGQQGWDRKYIVLEGSKVLIYDNEAREAGQRPVEEFELCLPDGDVSIHGAVGASEL ANTAKADVPYILKMESHPHTTCWPGRTLYLLAPSPPDKQRWVTALESVVAGGRVSREK LEVTEIOARSSLGTPARAYLSI PUPRYLGPAISSCAIYLASSYOKLRVI CCKCMIUV ESCTEOHRVPSTSRSPUKRGPPTYNEHITKRVASSPAPPEGPSHPREPSTPHRYRDRE GRTELRRDKSPGRPLEREKSPGRMLSTRRERSPGRLFEDSSRGRLPAGAVRTPLSCVN /db_xref="G1;2745840" /translationf=mEQEMARLHRRVSEVEAVLSQKEVELKASETQRSLLEQDLATYI ALNVLKNSLTHI PGIGAVPQIYIIKDLEKLLMIAGEERALCLVDVKKVKOSLAQSHLP AQPDVSPNIPBAVKGCHLFAAGKIENSLCICAAMPSKVVILKYNDNLSKFCIRKEIET **VQANSTGQREEYLLCFHEFGVFVDSYGRRSRTDDLKWSRLPLAFAYREPYLFVTHFNS** AEADAAWDCTSCERLPVWVEKLLGNSLLKLEGDDRLDMNCTLPFSDQVVLVGTEEGLY SEPCSCIHFTNYSILIGTNKFYBIDMKQYTLEEFLDKNDHSLAPAVFASSTNSFPVSI gene="citron" 'function="interacting with Rho family GTPases" /note="may be excised by alternative splicing"
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Query Match 5952;
Best Local Similarity 85.7%; Pred. No. 0;
Matches 4471; Conservative 0; Mismatches 444; Indels 252; Gaps

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